EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

| CATEGORY CODE | QUANTITY | DESCRIPTION |
|------------------|--------------------------------------|---|
| 973004 | l EA | SIZE 'S' CABINET WITH CONTROLLER AND VIDEO INTERFACE EQUIPMENT: 1-8 CAMERAS |
| 973023 | 170 SF | SHEET ALUMINUM GROUND MOUNTED SIGN |
| | | 11 EA - SI-I (36 IN. X 36 IN.) |
| | | 4 EA - S4-4(2) (36 IN. X I5 IN.) |
| | | 4 EA - WI6-7pL (24 IN. X I2 IN.) FYG |
| | 3 EA - WI6-7pR (24 IN. X I2 IN.) FYG | |
| | | 2 EA - R4-7 (24 IN. X 30 IN.) |
| | | I EA - R3-18 (36 IN. X 36 IN.) |
| | | 1 EA - RIO-7 (24 IN. X 30 IN.) |
| | | 1 EA - M3-4 "WEST" (24 IN. X 12 IN.) |
| | | ! EA - M4-5 (INTERSTATE) "TO" (24 IN. X 12 IN.) |

I EA - MI-I "I-270" (30 IN. X 24 IN.)

IEA - MI-5 "MD 28" (24 IN. X 24 IN.)

I EA - M5-2 (INTERSTATE) (15 IN. X 21 IN.)

"PUSH BUTTON TO CROSS ROCKVILLE PIKE"

"PUSH BUTTON TO CROSS DODGE STREET"

SHEET ALUMINUM MAST ARM/POLE MOUNTED SIGN:

"PUSH BUTTON TO CROSS RICHARD MONTGOMERY DRIVE"

I EA - M5-2 (I5 IN, X 21 IN.)

4 EA - RIO-3(I) (9 IN. X I5 IN.)

2 EA - RIO-3(I) (9 IN. X I5 IN.)

2 EA - RIO-3(I) (9 IN. X I5 IN.)

2 EA - R3-5L (30 IN. X 36 IN.)

2 EA - D-3(I) (96 IN. X 16 IN.)

1 EA - R3-18 (36 IN. X 36 IN.)

1 EA - R3-5R (30 IN. X 36 IN.)

I EA - R3-5(a) (30 IN. X 36 IN.)

! EA - D-3(!) (!20 IN. X !6 IN.)

I EA - D-3(I) (96 IN. X I6 IN.) *DODGE ST" (DUAL FACED)

 $I EA - MI-5(6) (30 IN. \times 48 IN.)$

"SOUTH, MD 355, RIGHT ARROW"

 $1 EA - MI-5(6) (48 IN. \times 72 IN.)$

"NORTH, MD 355, LEFT ARROW"

"RICHARD MONTGOMERY DR' (DUAL FACED)

"ROCKVILLE PIKE" (DUAL FACED)

973023

 $1 EA - MI - 5(6) (30 IN. \times 48 IN.)$ "NORTH, MD 355, RIGHT ARROW" $I EA - MI - 5(6) (48 IN. \times 72 IN.)$ "SOUTH, MD 355, LEFT ARROW"

EQUIPMENT LIST 'AI'

EQUIPMENT TO BE FURNISHED BY MONTGOMERY COUNTY.

NONE.

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

| <u>CATEGORY</u> <u>CODE</u> | QUAN' | TITY | DESCRIPTION |
|--------------------------------|-------|------|--|
| 203030 | 4 | CY | TEST PIT EXCAVATION |
| 585621 | 1,225 | LF | 12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES |
| 585625 | 155 | LF | 24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES |
| 801004 | 16 | CY | CONCRETE FOR SIGNAL FOUNDATION |
| 801106 | 285 | LF | WOOD SIGN SUPPORTS 4 INCH X 6 INCH |
| 801711 | Ш | SF | REMOVE EXISTING GROUND MOUNTED SIGNS AND SUPPORTS |
| 802145 | 2 | EA | ADJUST EXISTING HANDHOLE |
| 802501 | 580 | LF | NO. 6 AWG STRANDED BARE COPPER GROUND WIRE |
| 802570 | 50 | LF | ELECTRICAL CABLE I-CONDUCTOR #2/O AWG CABLE |
| 805118 | 300 | LF | 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED |
| 805125 | 85 | LF | 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED |
| 805135 | 75 | LF | 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED |
| 805140 | 120 | LF | 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED |
| 807500 | 1 | EA | EMBEDDED METERED SERVICE PEDESTAL |
| 810022 | 25 | LF | ELECTRICAL CABLE I-CONDUCTOR NO. 8 AWG-THHN/THWN |
| 811001 | 5 | EA | FURNISH AND INSTALL ELECTRICAL HANDHOLE |
| 811002 | 5 | EΑ | REMOVE ELECTRICAL HANDHOLE |
| 813014 | 170 | SF | INSTALL GROUND MOUNTED SIGN |
| 813015 | 161 | SF | INSTALL OVERHEAD SIGN |
| 813023 | 10 | SF | RELOCATE EXISTING GROUND MOUNTED SIGNS |
| 816002 | 3 | EA | IP-BASED VIDEO DETECTION CAMERA AND ANY LENGTH LEAD-IN CABLE |
| 818004 | 6 | EA | IO FOOT BREAKAWAY PEDESTAL POLE |
| 010818 | [| EA | 14 FOOT BREAKAWAY PEDESTAL POLE |
| 818036 | 4 | EA | STEEL POLE WITH A SINGLE 50 FOOT MAST ARM |
| 822002 | 200 | LF | 12-PAIR COMMUNICATION CABLE, JELLYFILLED (UNDERGROUND) |
| 837001 | 8 | EA | GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH |
| 860284 | 47 | EA | 12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION |
| 860285 | 8 | EA | 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD |
| 861105 | 1,255 | LF | ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG) |
| 861107 | 1,375 | LF | ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG) |
| 861108 | 2,110 | LF | ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG) |
| 865210 | 8 | EA | AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGN |
| 865300 | 1 | EA | 2 WIRE APS CENTRAL CONTROL UNIT |
| 871202 | 1 | EA | INSTALL CONTROLLER AND CABINET - BASE MOUNT |
| 873002 | l | LS | REMOVE AND DISPOSE OF EXISTING SIGNAL EQUIPMENT |
| | | | |

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

CODE

QUANTITY

DESCRIPTION

NONE.

GENERAL NOTES

- MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING MDSHA STANDARD TYPICALS FOR TRAFFIC CONTROL.
 THE CONTRACTOR SHALL CONTACT MISS UTILITY TO VERIFY ALL UNDERGROUND UTILITIES PRIOR TO THE INSTALLATION OF PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER
- PROJECT ENGINEER.

 3. WITHIN 36 IN. OF UNDERGROUND UTILITY LOCATIONS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE FOR FOUNDATION AND CONDUIT BY HAND.

 4. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL FOULPMENT. EQUIPMENT.
- THE CONTRACTOR SHALL INTEGRATE PROPOSED/EXISTING CONCRETE FOUNDATIONS WITH NEW CURB/SIDEWALK RAMP WHERE NECESSARY. THE FOUNDATIONS SHALL BE FLUSH WITH AND PART OF THE FINAL CURB OR SIDEWALK GRADE TO INCREASE ACCESSIBILITY FOR PEDESTRIANS.
- 6. THE MONTGOMERY COUNTY SHOP WILL BE RESPONSIBLE FOR ALL INTERNAL CABINET WIRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING
- AND PROPERLY LABELING ALL SIGNAL CABLES. 7. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED ELECTRICAL
- 8. THE CONTRACTOR SHALL VERIFY THE PROPOSED POLE LOCATIONS PRIOR TO
- 9. THE CONTRACTOR SHALL CENTER THE PROPOSED CROSSWALKS ON NEWLY
- CONSTRUCTED RAMPS.
- 10. ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MDSHA STANDARDS.
- 11. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.09 AND 4E.10 AND FIG. 4E.3 AND 4E.4; AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE." IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL THE CONFLICT HAS BEEN DESCRIVED. A DESIGN WALVED SHALL BE OBTAINED APPROVED BY
- RESOLVED. IF NEEDED. A DESIGN WAIVER SHALL BE OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

 12. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR FROM A 60 IN. × 60 IN. LEVEL LANDING AREA. A LEVEL LANDING AREA IS AN AREA WITH A CROSS SLOPE OF LESS THAN OR
- 13. PUSHBUTTON ARROWS ARE TO BE TURNED PARALLEL TO THE CROSSWALK FOR
- WHICH THEY ARE INTENDED.

 14. ALL TRAFFIC SIGNAL MODIFICATIONS SHALL BE CONSTRUCTED PRIOR TO SIDEWALK CONSTRUCTION.

 15. ALL ACCESSIBLE PEDESTRIAN CONTROL EQUIPMENT SHALL BE DELIVERED TO THE MONTCOMERY COUNTY SIGNAL SHOP FOR TESTING AND PROCESSIBLE PEDESTRIAN CONTROL.
- THE MONTGOMERY COUNTY SIGNAL SHOP FOR TESTING AND PROGRAMMING PRIOR TO INSTALLATION. CONTACT MR. KAMAL HAMUD AT 240-777-8761 TO
- 16. PUSHBUTTON IS TO BE LOCATED SO THAT A PEDESTRIAN IN A WHEELCHAIR LOCATED ON THE LEVEL LANDING AREA DOES NOT HAVE TO REACH MORE THAN
- 17. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE SIGNAL MODIFICATION.
- 18. THE 10 FT. MINIMUM SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER OF POLE TO CENTER OF POLE.
- 19. VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- 20. THE CONTRACTOR SHALL ENSURE THE EXISTING TRAFFIC SIGNAL REMAINS
- OPERATIONAL UNTIL RECONSTRUCTED TRAFFIC SIGNAL IS OPERATIONAL. 21. DISCONNECTING AND SPLICING OF INTERCONNECT CABLES IN THE TRAFFIC SIGNAL CABINETS SHALL BE PERFORMED BY MONTGOMERY COUNTY FORCES. THE CONTRACTOR SHALL RUN INTERCONNECT CABLES INTO THE CABINET AND PROPERLY LABEL THEM. CONTACT MR. KAMAL HAMUD AT 240-777-8761 FORTY EIGHT (48) HOURS IN ADVANCE PRIOR TO INSTALLING INTERCONNECT
- CABLES. 22. TREES SHALL BE SUFFICIENTLY TRIMMED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION BY SHA MAINTENANCE FORCES TO PROVIDE ADEQUATE VISIBILITY FOR THE CPS SIGNAL HEAD NO. 16 INSTALLED IN THE
- QUADRANT. 23. REFER TO THE DETAIL SHEETS IN THE ROADWAY PLANS FOR PROPOSED RAMPS.
 24. THE CONTRACTOR SHALL REFER TO FIGURE 3B-200 OF THE 2011 MARYLAND
 M.U.T.C.D. FOR CROSSWALK PAVEMENT MARKING DETAIL.
 25. THE CONTRACTOR SHALL NOTIFY MR. KAMAL HAMUD AT 240-777-8761 OF THE
 MONTGOMERY COUNTY DOT SEVENTY TWO (72) HOURS PRIOR TO CONSTRUCTION.



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 355 (ROCKVILLE PIKE) AT DODGE STREET / RICHARD MONTGOMERY DRIVE

ROCKVILLE, MD GENERAL INFORMATION SHEET

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|---------------|--------------------------|-----------------------|---------------------|-----------|
| SCALE NONE | ADVERTISED DATE_ | 10/2013 (| CONTRACT NO | MO1315477 |
| | SKG OF STV SKG OF STV | _ | MONTGO | |
| CHECKED BY | SDY OF STV | TIMS NO. | 15035509.05 L765 | |
| F.A.P. NO. | | TOD NO. | | |
| TS NO. 49C-GI | DRAWING SG-0: | 3 OF 05 | SHEET NO. | OF |

STV Incorporated 7125 Ambassador Road, Suite 200 Baltimore, MD 21244 www.stvinc.com

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